



2853

Patent
Attorney's Docket No. 009683-329

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)
)
Eiichi SANO et al.) Group Art Unit: 2853
)
Application No.: 09/057,502) Examiner: Craig A. Hallacher
)
Filed: April 9, 1998) Confirmation No.: 6476
)
For: INK JET PRINTER CAPABLE OF)
INFORMING HIGH DEFINITION)
IMAGES)
)

AMENDMENT/REPLY TRANSMITTAL LETTERAssistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Enclosed is a reply for the above-identified patent application.

- ☐ A Petition for Extension of Time is also enclosed.
- ☐ A Terminal Disclaimer and a check for ☐ \$55.00 (248) ☐ \$110.00 (148) to cover the requisite Government fee are also enclosed.
- ☐ Also enclosed is _____.
- ☐ Small entity status is hereby claimed.
- ☐ Applicant(s) request continued examination under 37 C.F.R. § 1.114 and enclose the ☐ \$370.00 (279) ☐ \$740.00 (179) fee due under 37 C.F.R. § 1.17(e).
- ☐ Applicant(s) previously submitted __, on __, for which continued examination is requested.
- ☐ Applicant(s) request suspension of action by the Office until at least __, which does not exceed three months from the filing of this RCE, in accordance with 37 C.F.R. § 1.103(c). The required fee under 37 C.F.R. § 1.17(i) is enclosed.
- ☐ A Request for Entry and Consideration of Submission under 37 C.F.R. § 1.129(a) (146/246) is also enclosed.
- ☒ No additional claim fee is required.

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(05/02)

☐ An additional claim fee is required, and is calculated as shown below:

AMENDED CLAIMS					
	NO. OF CLAIMS	HIGHEST NO. OF CLAIMS PREVIOUSLY PAID FOR	EXTRA CLAIMS	RATE	ADDT'L FEE
Total Claims		MINUS =		× \$18.00 (103) =	
Independent Claims		MINUS =		× \$84.00 (102) =	
If Amendment adds multiple dependent claims, add \$280.00 (104)					
Total Amendment Fee					
If small entity status is claimed, subtract 50% of Total Amendment Fee					
TOTAL ADDITIONAL FEE DUE FOR THIS AMENDMENT					

☐ A claim fee in the amount of \$_____ is enclosed.

☐ Charge \$_____ to Deposit Account No. 02-4800.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(d) and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: William C. Rowland
 William C. Rowland
 Registration No. 30,888

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Date: May 28, 2002



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Group Art Unit: 2853

Examiner: Craig A. Hallacher

#11/Response
Adrian
6/3/02

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RESPONSE

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The Examiner is thanked for the careful examination of the Application. However, in view of the following arguments, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections.

Claims 1-3, 5-11, 13-18, and 20-33 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,689,291, issued to *Tence*, in view of U. S. Patent No. 5,745,131, issued to *Kneezel*.

The Examiner alleges that *Tence* discloses an ink jet printer ejecting a plurality of kinds of ink droplets of different sizes from a single nozzle depending upon data to be printed, comprising a nozzle for ejecting ink droplets of different sizes to form an image on a recording medium with image forming dots and smoothing dots (smaller than the normal dot); and a smoother for performing a smoothing process using a dot smaller than a dot

forming said image. The only portion of *Tence* that is cited in the Office Action to support this alleged disclosure are Figures 2B and 2C and column 13, lines 29 - 35.

It is clear that *Tence* discloses a method in the apparatus for producing ink dots of different sizes. Specifically, as alleged by the Examiner, the size of the ink drops illustrated in Figure 2B are different than those from Figure 2C.

However, the support for the latter half of the alleged disclosure of *Tence* is not clear. Specifically, Applicants do not agree that *Tence* discloses forming an image using both image forming dots and smoothing dots. In addition, Applicants dispute that *Tence* discloses a smoother for performing a smoothing process using a dot smaller than a dot forming said image.

Specifically, the section of *Tence* identified by the Examiner, i.e., column 13, lines 29-35, appears to indicate that in one printing mode, i.e., a first resolution, all of the ink drops have a single size ("a single drop size is selected"), and the dot to dot spacing of the dots corresponds to the selected size of the ink drop. *Tence* does not appear to disclose placing a smaller (smoothing dot) next to an adjacent image forming dot, wherein the spacing between the imaging forming dot and the smoothing dot would be closer than the spacing between two adjacent image forming dots. The claim language in *Tence* also supports the Applicants' position. For example, when claim 4 is read in combination with claim 1, it indicates that smaller dots are used when printing in one resolution, and larger dots are used when printing in a different resolution. *Tence* does not appear to teach or suggest that different size dots are printed adjacent to each other in one printing operation.

Accordingly, Applicants submit that *Tence* does not teach or suggest forming an image on a recording medium with image forming dots and smoothing dots that are smaller than the image forming dots. Applicants also submit that *Tence* does not teach or suggest a smoother for performing a smoothing process using a dot smaller than a dot forming the image. In the event that the Examiner persists with the current rejection, the examiner is respectfully requested to provide specific support wherein *Tence* discloses a smoother for performing a smoothing process using a dot smaller than a dot forming the image, and also where *Tence* discloses use of image forming dots and smoothing dots.

At best, it appears that *Tence* teaches the use of one size dots when printing in one resolution and the printing of a different size dot when printing in a different resolution.

If there is other disclosure in *Tence* which teaches the use of printing different size dots in a single line of printing, there is no specific teaching that the spacing of such dots would be set forth in accordance with the present application.

Accordingly, the basic premise of the teaching of *Tence* relied upon by the Examiner is based on an incorrect understanding of *Tence*. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection of the present application.

Kneezel has been discussed in this application in prior responses. For example, the Examiner's attention is directed to the response filed on December 21, 2001, wherein it was explained how *Kneezel* is able to vary the spacings between certain dots because *Kneezel* uses a plurality of nozzles with specific spacings therebetween in order to achieve the varied spacing.

Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection of the claims of the present application based on *Tence* and *Kneezel*.

In the event that there are any questions concerning this response or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: William C Rowland

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